

II. Amendment to the Claims

Claims 1, 3, 4, 7, 8, 10-16 and 20-29 are pending in the present application. Claim 23 is amended as set forth below. New Claims 30 and 31 have been added. This listing and version of the claims replaces all prior listings and versions of the claims.

1. (previously presented) An insulation manufacturing system comprising a curing oven tower for heating an uncured or partially cured insulation mat, said curing oven tower comprising a plurality of vertical oven zones comprising heat sources, and a conveyor system comprising a plurality of pairs of counter-rotating conveyors disposed to move said mat through said plurality of vertical oven zones for curing, said mat being disposed between said counter-rotating conveyors.

2. (canceled)

3. (previously presented) The system of claim 1, wherein said conveyor system comprises rotating conveyors cooperating to move said insulation mat both horizontally and vertically through said curing oven tower in a serpentine path.

4. (original) The system of claim 3, wherein said path vertically overlaps itself.

5-6. (canceled)

7. (original) The system of claim 1, further comprising recirculating means for recirculating air from a region proximate to the top of said curing oven tower to a region proximate to a bottom of said curing oven tower.

8. (previously presented) A method of curing insulation comprising moving an uncured or partially cured insulation mat through a curing oven tower, said curing oven tower comprising a plurality of vertical oven zones comprising heat sources, said moving step including the step of moving the insulation mat through the plurality of vertical oven zones for curing.

9. (canceled)
10. (previously presented) The method of claim 8, wherein said moving step includes the step of moving said insulation mat both horizontally and vertically through said curing oven in a serpentine path.
11. (original) The method of claim 10, wherein said path vertically overlaps itself.
12. (previously presented) The method of claim 11, wherein said moving step includes the step of conveying said insulation mat with a plurality of conveyors disposed to move said insulation mat both horizontally and vertically through said oven tower.
13. (previously presented) The method of claim 12, wherein said plurality of conveyors comprises a plurality of pairs of counter rotating conveyors that cooperate to move said insulation mat through said oven tower.
14. (original) The method of claim 8, further comprising the step of recirculating air from a region proximate to the top of said curing oven tower to a region proximate to a bottom of said curing oven tower.
15. (previously presented) The method of claim 8, wherein said insulation mat comprises glass fibers.
16. (previously presented) A insulation manufacturing system comprising a curing oven tower for heating an uncured or partially cured fiberglass insulation mat, said curing oven tower comprising a heat source and a conveyor system comprising cooperable pairs of counter-rotating conveyors arranged for moving said insulation mat both vertically and horizontally through said curing oven tower in a serpentine path.
- 17-19. (canceled)

20. (original) The system of claim 16, further comprising recirculating means for recirculating air from a region proximate to the top of said curing oven tower to a region proximate to a bottom of said curing oven tower.

21. (original) The system claim 16, wherein said serpentine path vertically overlaps itself.

22. (previously presented) A method of curing insulation comprising moving an uncured or partially cured insulation mat both horizontally and vertically in a serpentine path through a curing oven tower comprising a heat source.

23. (currently amended) The method of claim 22, wherein said, said curing oven tower comprises a conveyor system for moving said insulation mat both vertically and horizontally through said curing oven tower, said moving step comprising the step of conveying said insulation mat with said conveyor system.

24. (previously presented) The method of claim 23, wherein said conveying step includes the step of conveying said insulation mat with a plurality of cooperable conveyors disposed to move said insulation mat both horizontally and vertically through said oven tower.

25. (previously presented) The method of claim 24, wherein said plurality of conveyors comprises a plurality of pairs of counter rotating conveyors that cooperate to move said insulation mat through said oven tower.

26. (original) The method of claim 24, wherein said serpentine path vertically overlaps itself.

27. (original) The method of claim 22, further comprising the step of recirculating air from a region proximate to the top of said curing oven tower to a region proximate to a bottom of said curing oven tower.

28. (previously presented) The method of claim 22, wherein said insulation mat comprises fiberglass.

29. (original) The method of claim 22, wherein said serpentine path vertically overlaps itself.

30. (new) The system of claim 3, wherein a portion of said rotating conveyors cooperating to move said insulation mat vertically form a nip zone with a portion of said rotating conveyors cooperating to move said insulation horizontally, said nip zone including at least one inclined belt for receiving said insulation mat.

31. (new) The method of claim 22, wherein said uncured or partially cured mat is transported through a nip zone formed between a horizontally disposed rotating conveyor and a vertically disposed rotating conveyor, said nip zone having at least one inclined belt for receiving said uncured or partially cured mat.